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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/224,219	12/30/1998	S. VINCENT BIRLESON	45981-P016US	3976

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EXAMINER	
GESESSE, TILAHUN	
ART UNIT	**PAPER NUMBER**
2684	17

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/224,219	BIRLESON, S. VINCENT	
	Examiner	Art Unit	
	Tilahun B Gesesse	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-53* is/are pending in the application.

4a) Of the above claim(s) *2,7,14,23,28* is/are withdrawn from consideration.

5)☐ Claim(s) *38-53* is/are allowed.

6)☒ Claim(s) *1,3-6,8-13,15-22,24-27 and 29-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.

EXAMINER

ART UNIT	PAPER
	17

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

DETAILED ACTION

1. This is in response to applicant's amendment and response filed October 28, 2003 in which claims 1,3-6,8-13,15-22,24-27,29-53 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3-6,8-13,15-22,24-27,29-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cqporizzo et al (6,014,547)"caporizzo" in view of Yamashita et al (4,419,768) "Yamashita".

As to claim 1 , Caporizzo discloses a tuner (11) for extracting specific signals from a set of signals on a carrier (RF input, col.2 lines 42-58) wherein the set of signals have at least one of a set of measurable characteristics, (a settop terminal (12), which measures the input RF carrier signal power level at several frequencies with the CATV RF input bandwidth upon system power up, col. 3 lines 34-54). Caporizzo discloses means (14,16) for determining from a measurement of the measurable characteristics that are present in a particular set of signals certain desirable tuner operating characteristics, (col. 3 lines 34-54 and fig.2).Caporizzo discloses means operable under control of said determining means for changing the operating characteristics of the tuner, (col.3 lines 1-14, col.3 lines 34- 44,fig.5). Caporizzo does not disclose expressly means for changing power consumption levels

with respect to tuner components for optimize tuner power level. However, Yamashita discloses a tuner is controlled to reduce power consumption by switching to UHF channels and to optimize to level sufficient to compensate the loss introduced to tuning components, (col. 4, line 45-col.5 line 1 and fig.1). Since, Caporizzo , in the same field of endeavor , the power up mode 200 may be entered periodically to ensure that the equalization , attenuation and gain control are optimally tailored to the current condition of the CATV transmission network (col. 5, lines 36-47), therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Caporrizzo and Yamashita in controlling power consumption to optimize the reception of selected signals , as taught by Yamashita, in order to acquire best reception of by adjusting the power consumption of the tuner.

As to claims 4,8,19-20, Caporizzo et al disclose means for changing power levels with respect to said tuner components,(abstract).

As to claim 3, Caporizzo et al disclose means for determining optimum operating characteristics for said tuner depending upon said determined operating characteristics, (abstract).

As to claim 5, Caporizzo et al disclose the tuner is constructed on a single substrate (fig.2).

As to claims 6,9 18, Caporizzo et al disclose the method of operating a tuner (col. 3 line 62-col.4 lines 7). Caporizzo et al disclose assessing from time to time the incoming signal environment wherein an assessment of said incoming signal environment is a function of signals being processed by said tuner, (col.5 lines

41-44). Caporizzo et al disclose based on the assessment environment selecting an operating level for said tuner (col.5 lines 44-47) ; and Caporizzo et al disclose setting the operation of said tuner consistent with said selected operating level (col.4 lines 58-col.5 line 23). Caporizzo does not disclose expressly the selecting an optimum power consumption levlel for said tuner. However, Yamashita
discloses a tuner is controlled to reduce power consumption by switching to UHF channels and to optimize to level sufficient to compensate the loss introduced to tuning components, (col. 4, line 45-col.5 line 1 and fig.1). Since, Caporizzo , with similar field of area, the power up mode 200 may be entered periodically to ensure that the equalization , attenuation and gain control are optimally tailored to the current condition of the CATV transmission network (col. 5, lines 36-47), therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Caporrizzo and Yamashita in controlling power consumption to optimize the reception of selected signals , as taught by Yamashita, in order to acquire best reception of by adjusting the power consumption of the tuner.

As to calims 10-11, Caporizzo et al disclose the determining step includes taking signal measurements of the signal being processed by the tuner (abstract).

As to claims 12,21, Caporizzo et al disclose receiving from external source to the tuner (RF input of CATV fig.1).

As to claims 13, 22,Caporizzo et al disclose monitoring the RF input and the inband receive signal strength (microprocessor) (fig.2).

As to claims 15 and 17, Caporizzo et al disclose adjusting the number of

components that are active at any particular time (col.4 lines 15-28).

As to claims 16, 24-25, Caporizzo et al disclose the channel sweep and static methed at different times (col.5 lines 30-36).

As to claims 26,29 Caporizzo et al disclose the method of operating a tuner (col. 3 line 62-col.4 lines 7). Caporizzo et al disclose assessing from time to time the incoming signal environment wherein an assessment of said incoming signal environment is a function of signals being processed by said tuner, (col.5 lines 41-44). Caporizzo et al disclose based on the assessment environment selecting an operating level for said tuner (col.5 lines 44-47) ; and Caporizzo et al disclose setting the operation of said tuner consistent with said selected operating level (col.4 lines 58-col.5 line 23). Caporizzo does not disclose expressly the selecting an optimum power consumption levlel for said tuner. However, Yamashita discloses a tuner is controlled to reduce power consumption by switching to UHF channels and to optimize to level sufficient to compensate the loss introduced to tuning components, (col. 4, line 45-col.5 line 1 and fig.1). Since, Caporizzo , in the same field of endeavor, the power up mode 200 may be entered periodically to ensure that the equalization , attenuation and gain control are optimally tailored to the current condition of the CATV transmission network (col. 5, lines 36-47), therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Caporrizzo and Yamashita in controlling power consumption to optimize the reception of selected signals , as taught by Yamashita, in order to acquire best reception of by adjusting the power consumption of the tuner.

As to claim 27, Caporizzo et al disclose a tuner comprising the circuit for determining tuner operating characteristics from knowledge of the signals being processed by the tuner (fig.2) and at least one circuit for adjusting the operating characteristics in accordance with said determining the circuitry fig.5) .

As to claim 29, Caporizzo et al disclose adjusting the number of components that are active at any particular time (col.4 line 55-col. 5 line 23).

As to claim 30, Caporizzo et al disclose receiving from external source (RF input of CATV),fig.1.

As to claims 31, 34-37. Caporizzo et al disclose the channel sweep and static methed at different times (col.5 lines 30-36).

As to claims 32-33, Caporizzo discloses a tuner (11) for extracting specific signals from a set of signals on a carrier (RF input, col.2 lines 42-58) wherein the set of signals have at least one of a set of measurable characteristics, (a settop terminal (12), which measures the input RF carrier signal power level at several frequencies with the CATV RF input bandwidth upon system power up, col. 3 lines 34-54). Caporizzo discloses means (14,16) for determining from a measurement of the measurable characteristics that are present in a particular set of signals certain desirable tuner operating characteristics, (col. 3 lines 34-54 and fig.2).Caporizzo discloses means operable under control of said determining means for changing the operating characteristics of said tuner, (col.3 lines 1-14, col.3 lines 34- 44,fig.5). Caporizzo does not disclose expressly means for changing power consumption levels with respect to tuner components for optimize tuner power level. However, Yamashita

discloses a tuner is controlled to reduce power consumption by switching to UHF channels and to optimize to level sufficient to compensate the loss introduced to tuning components, (col. 4, line 45-col.5 line 1 and fig.1). Since, Caporizzo , in the same field of endeavor , the power up mode 200 may be entered periodically to ensure that the equalization , attenuation and gain control are optimally tailored to the current condition of the CATV transmission network (col. 5, lines 36-47), therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Caporrizzo and Yamashita in controlling power consumption to optimize the reception of selected signals , as taught by Yamashita, in order to acquire best reception of by adjusting the power consumption of the tuner.

Allowable Subject Matter

4. Claims 38-53 are allowed over the prior art. The following is an examiner's statement of reasons for allowance: the instant invention is directed to tuner system self adaptive to signal environment. The independent claim unique structural feature " environment assessment means for providing input signal environmental assessment, means for determining a power level from the input signal environmental assessment information, wherein the said power level determining means is coupled to said input signal environmental assessment means for communication of said input signal environmental assessment information ,means for controlling power level information and means for tuning a selected signals from set of signals." The prior art Caporizzo et al (us 6,014,547) fail to the underlined limitation render obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

5. Applicant's arguments filed October 28,2003 have been fully considered but they are not persuasive.

On page 10, third paragraph and page 17, second paragraph of response , applicant argued that motivation is improper.

The examiner disagrees. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the combination of Caporizzo et al and yamashita et al is proper.

On page 10 through page 12 , third paragraph, of response, applicant argued that claim limitations of independent claims 1 and 32 are not met by Caporizzo and Yamashita.

The examiner disagrees. In response to applicant's argument that claim limitations are not met, the fact that applicant has recognized another advantage, which

would, flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Caporizzo discloses a CATV set top terminal measures the input RF carrier signal power at several frequencies (abstract). The system utilizes these measurements to selectively equalize and process the RF input signal depending upon the carries frequency selected and the desired signal level to be input to the RF tuner (abstract) Further more, Caporizzo teaches disable equalizer tune to high frequency measure and record the carrier level and tune to low frequency measure and record the carrier level (figure 5).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Carney (5,590,156) discloses tuning and measuring RSSI of the received frequency (abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 703-308-5873. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

TILAHUN GESESSE
PATENT EXAMINER
Art unit:2684

TBG

January 12, 2004